

The opinion in support of the decision being entered today was not written for publication and is not precedent of the Board.

Paper No. 37

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte GERRIT A. VAN SCHOUWENBURG

**MAILED**

**FEB 12 2003**

**PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Appeal No. 2002-1636  
Application No. 08/716,223

ON BRIEF

Before OWENS, KRATZ and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 3, 9-12, and 14-20, the remaining claims on appeal.

Claims 1, 3, 9 and 11 are illustrative:

1. A method for manufacturing a coherent piece of raw meat from smaller pieces of raw meat, comprising the steps of:

massaging and/or tumbling smaller pieces of meat with one or more edible salts such that the proteins of the smaller pieces of meat solubilize and exude from the salt treated pieces of meat and a layer of exudate of solubilized proteins forms on and covers the surfaces of the pieces of meat;

Appeal No. 2002-1636  
Application No. 08/716,223

mixing an acidifying agent into the layer of exudate of solubilized proteins to selectively denature and coagulate the solubilized proteins such that the smaller pieces of meat are mutually joined but themselves substantially retain the properties of unprocessed raw meat because proteins present in the smaller pieces of meat substantially do not denature and holding the piece of meat against each other to form the coherent piece of meat,

thereby forming an adhesive layer between the pieces of meat as the solubilized proteins denature under influence of a decrease in pH resulting from the addition of the acidifying agent, and

wherein the pH decrease is obtained by adding an additive causing a delayed acidification in the layer with solubilized proteins, said additive selected from the group consisting of gluconodeltalacton and an encapsulated edible acid.

3. The method of claim 1 wherein at least on the interfaces between the smaller pieces of meat and the layer with solubilized proteins a temporary pH decrease is brought about of 0.5 to 3.

9. The method of claim 1, wherein the solubilized proteins are at least partially formed by preparing a forcemeat from finely reduced meat with water and one or more suitable salts which is mixed with the smaller pieces of meat.

11. The method of claim 9, wherein the relatively smaller pieces of meat are massaged with one or more suitable salts prior to addition of the forcemeat.

The examiner relies upon the following references as evidence of unpatentability:

Weiner	3,740,235	Jun. 19, 1973
Weiss et al. (Weiss)	4,772,477	Sep. 20, 1988

Appeal No. 2002-1636  
Application No. 08/716,223

Claims 1, 3, 9-12, and 14-20 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 1, 3, 12, 14, 15 and 18-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Weiss.<sup>1</sup>

Claims 1, 3, 9-12 and 14-20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Weiss in view of Weiner.<sup>2</sup>

On page 3 of brief, appellant submits that the claims do not stand or fall together. Appellant groups the claims as set forth on page 3. Hence, we consider claims 1, 3, 9, and 11.<sup>3</sup> 37 CFR § 1.192(c) (7) (8) (2000).

#### OPINION

##### I. The 35 U.S.C. § 112, second paragraph rejection (indefiniteness)

The examiner states that the use of the phrases "substantially retain properties of unprocessed raw meat" and "substantially do not denature", renders the scope of the claims undeterminable. (answer, page 3).

Claim 1 is again reproduced below with certain text bolded, for emphasis:

1. A method for manufacturing a coherent piece of raw meat from smaller pieces of raw meat, comprising the steps of:

---

<sup>1</sup> We note that claim 4 has been cancelled, and hence not listed as a rejected claim in this rejection.

<sup>2</sup> We note that claim 4 has been cancelled, and hence not listed as a rejected claim in this rejection.

<sup>3</sup> However, for reasons made evident in this decision, we needed only to consider claim 1 from this group to make our determinations in this case.

massaging and/or tumbling smaller pieces of meat with one or more edible salts such that the proteins of the smaller pieces of meat solubilize and exude from the salt treated pieces of meat and a layer of exudate of solubilized proteins forms on and covers the surfaces of the pieces of meat;

mixing an acidifying agent into the layer of exudate of solubilized proteins to selectively denature and coagulate the solubilized proteins such that the smaller pieces of meat are mutually joined but themselves substantially retain the properties of unprocessed raw meat because proteins present in the smaller pieces of meat substantially do not denature and holding the piece of meat against each other to form the coherent piece of meat,

thereby forming an adhesive layer between the pieces of meat as the solubilized proteins denature under influence of a decrease in pH resulting from the addition of the acidifying agent, and

wherein the pH decrease is obtained by adding an additive causing a delayed acidification in the layer with solubilized proteins, said additive selected from the group consisting of gluconodeltalacton and an encapsulated edible acid.

In both the brief and reply brief, appellant argues that the term "substantially" is used to indicate that the coherent piece of meat is not entirely raw, but that the overall coherent piece of meat retains properties of unprocessed raw meat because only the proteins between the pieces of raw meat are denatured and coagulated to hold the pieces of raw meat together. (brief, pages 4-5, reply brief, pages 3-4). Appellant argues that the word "substantially" means that the bulk of the meat retains the properties of unprocessed raw meat and that the proteins in the

Appeal No. 2002-1636  
Application No. 08/716,223

pieces of meat which make up the entire coherent piece of meat are not denatured. (reply brief, page 3). Appellant argues that one skilled in the art of food processing would understand that only the layer of exudated solubilized proteins are denatured so that the proteins present in the smaller pieces of meat substantially do not denature and retain the properties of unprocessed raw meat. (reply brief, pages 3-4). Appellant refers to page 4 lines 3-18 of the specification as illustrative. (brief, page 5).

We have carefully reviewed appellant's position and the specification in connection with this issue. For the following reasons, we affirm this rejection.

We note that the court stated in In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971), that the determination of whether the claims of an application satisfy the requirements of the second paragraph of Section 112 is:

To determine whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. It is here where the definiteness of language employed must be analyzed -not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. [footnote omitted.]

Furthermore, the purpose of the second paragraph of Section 112 is to basically insure, with a reasonable degree of particularity, an adequate notification of the metes and bounds of what is being claimed. See In re Hammack, 427 F.2d 1378, 1382, 166 USPQ 204, 208 (CCPA 1970).

Appeal No. 2002-1636  
Application No. 08/716,223

We further note that definiteness problems often arise when words of degree are used in a claim. That some language may not be precise, however, does not automatically render the claim invalid. When a word of degree is used, it must be determined whether the specification provides some standard for measuring that degree. Seattle Box Co. v. Industrial Cratering & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 573-574 (Fed. Cir. 1984).

In the instant case, appellants refer to page 4, lines 3-18 of the specification, reproduced below:

The processes which are of importance for the present invention involve selective denaturation, and a selective denaturation which can be accurately controlled. The term selective denaturation comprises a selection in accordance to place (between the meat parts in and on the surfaces of the meat parts) and/or a protein-selective denaturation. The objective here is to mutually join pieces of meat such that "one piece" of meat is once again created while the raw character of the meat is wholly retained. This is possible if coagulation takes place selectively on and/or close to the interfaces and the pieces of meat themselves are not denatured. The result is a product which retains all the characteristics of raw meat but in which (partial) coagulation has taken place on the interface between the parts, wherein bonds between proteins have been created which are strong enough to firmly bind together the meat parts.

We cannot find, in the above excerpt from the specification, a standard for measuring (1) the degree that the smaller pieces of meat retain the properties of unprocessed meat, and (2) the degree that the smaller pieces of meat do not denature. Moreover, the above excerpt states that an objective is to mutually join pieces of meat such that "one piece" of meat

is once again created while the raw character of the meat is wholly retained. It therefore appears that the raw character of the "one piece" of meat is wholly retained, whereas claim 1 recites that the smaller pieces of meat are mutually joined but themselves substantially retain the properties of unprocessed raw meat because proteins present in the smaller pieces of meat substantially do not denature.

We have carefully reviewed the entire specification in search for a standard of measuring the degree that the smaller pieces of meat retain the properties of unprocessed meat, and the degree that the smaller pieces of meat do not denature.

Page 4 of the specification, beginning at line 19, indicates:

To this end it is necessary in the first instance that situated on the surface of the meat parts are sufficient quantities of proteins which, after denaturation, can form a network of the desired strength. This can be achieved by massaging or tumbling the meat with salt (common salt and/or other edible alkali metal salts), whereby a part of the proteins can solubilize and exude, while the proteins on the surface of the meat parts are also "activated".

Page 4, beginning at line 30, indicates:

This can be done in the first place by causing the conditions necessary to bring about denaturation to occur only locally, i.e. on the interface, and then to form a coagulate. This can be realized for instance by creating a pH decrease specifically on the interface between the meat parts with the layer of solubilized proteins. This pH decrease changes the electrostatic charge of the protein molecules and thereby initiates the coagulations process, wherein electrostatic bonds occur first and subsequently hydrophobic and finally covalent bonds can also be formed. This process progresses relatively slowly and takes several hours.

Page 5, beginning at line 19, indicates:

In a practical embodiment of the method according to the invention smaller pieces of meat can be tumbled and/or massaged for a time for instance in a rotating drum with salt and water. A layer of exuded, solubilized meat proteins thereby forms on the outside of the meat parts. An additive causing delayed acidification (GDL [glusconodeltalacton] or an encapsulated edible acid such as citric acid, lactic acid, tartaric acid, etc.; a fat capsule or a sugar capsule can be used as capsule) is then distributed homogeneously through this layer and the meat parts placed in a mould or container and held under light pressure. The protein layer denatures and within several hours, depending on the chosen form of delay, a firm adhesive layer forms between the pieces of meat. It is important that the pH decrease occurs only locally, that is, in the layer of solubilized proteins and optionally on the surface of the pieces of meat but not in the interior of the pieces of meat. The amount of acid released both in the absolute sense and per unit of time must be such that the pH in the boundary layer decreases rapidly to a pH of 1 to 2. The acid then diffuses from the boundary layer and spreads through the meat mass. By correctly selecting the amount of acid and the delaying mechanism a considerable decrease in the pH in the interface can be temporarily achieved, while after the balance has been restored the total pH decrease is small, so that the other proteins do not denature and the taste is not affected either.

Certainly, the above excerpts set forth appellant's method of making a coherent piece of meat. However, a standard of measuring the degree that the smaller pieces of meat retain the properties of unprocessed meat, and the degree that the smaller pieces of meat do not denature is not provided. For example, the relative size or thickness of the solubilized protein layer versus the size or thickness of the meat pieces is not set forth.

Page 2 of the specification, beginning at line 5, indicates:



Appeal No. 2002-1636  
Application No. 08/716,223

However, in a piece of meat thus obtained in the known methods by boiling or at least a heat treatment at relatively high temperature, not only are the proteins on the surface of the constituent pieces of meat coagulated but the non-solubilized proteins in the interior of the constituent pieces are also denatured. The thus obtained piece of meat has properties completely different from raw meat in terms of taste, bite, etc.

The above excerpt may suggest that the degree of measuring is based on terms of taste and bite.

Given the subjectiveness involved in a taste-testing or "bite" standard of measurement, and given that no details of a reproducible taste-testing standard of measurement are provided in the record before us, we determine that one of ordinary skill in the art would not know the boundaries of the claims as presently written with a reasonable degree of particularity.

We make this determination especially in view of the art rejection of record and the comments made by both the examiner and the appellants. Specifically, appellant argues on page 9 of the brief that Weiss does not make a salami that is "substantially" raw. The examiner's position is that because Weiss sets forth the claimed process steps, appellant must prove that a function or property relied upon for novelty is not possessed by prior art compounds otherwise meeting the limitations of the claims. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). (answer, pages 8-9).

Hence, it appears that it is critical to the analysis of patentability of the presently claimed subject matter that the scope of the claim regarding the characteristics of the smaller pieces of meat involving the characteristics of "substantially

Appeal No. 2002-1636  
Application No. 08/716,223

retain the properties of unprocessed raw meat because proteins present in the smaller pieces of meat substantially do not denature", be adequately ascertainable with a reasonable degree of particularity.

In view of the above, we sustain the examiner's Section 112, second paragraph rejection. See Seattle Box Co. v. Industrial Cratering & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 573-574 (Fed. Cir. 1984).

Because our reasons for affirming the examiner's Section 112 rejection are somewhat different from the reasoning stated by the examiner, we denominate our affirmance as including a new ground of rejection pursuant to 37 CFR § 1.196(b), and provide procedural guidelines on pages 11-12 of this decision.

## II. The Art Rejections

Analysis of whether a claim is patentable over the prior art under 35 U.S.C. § 102 or § 103 begins with a determination of the scope of the claim. The properly interpreted claim must then be compared with the prior art.

Because the appealed claims fail to satisfy the definiteness requirements of the second paragraph of § 112, it reasonably follows that the examiner's rejection under § 102 or § 103 cannot be reached at this time.

To that end, the predecessor of our appellant reviewing court has held that it is erroneous to analyze claims based on "speculation as to the meaning of the terms employed and assumptions" as to their scope. In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA).

Appeal No. 2002-1636  
Application No. 08/716,223

Consequently, in comparing the claimed subject matter with the applied art, it is apparent that considerable speculations and assumptions are necessary in order to determine what in fact is being claimed. Since a rejection based on prior art cannot be based on speculations and assumptions, we reverse, pro forma, the examiner's § 102 and § 103 rejections. Id.

It is noteworthy that this is a procedural reversal rather than one based upon the merits of the 35 U.S.C. § 102 and § 103 rejections.

### III. Procedural Guidelines

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (§ 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

If appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to

Appeal No. 2002-1636  
Application No. 08/716,223

the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

IV. Conclusion

The 35 U.S.C. § 112 second paragraph rejection is **affirmed**.

Each of the prior art rejections is **reversed** on procedural grounds.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED & §1.196(b)**

*Terry J. Owens*  
TERRY J. OWENS

Administrative Patent Judge

*Peter F. Kratz*

PETER F. KRATZ

Administrative Patent Judge

*Beverly A. Pawlikowski*

BEVERLY A. PAWLIKOWSKI

Administrative Patent Judge

)  
)  
)  
)  
) BOARD OF PATENT  
) APPEALS AND  
) INTERFERENCES

BAP/sld

Appeal No. 2002-1636  
Application No. 08/716,223

RICHARD L. BYRNE  
700 KOPPERS BUILDING  
436 SEVENTH AVENUE  
PITTSBURGH, PA 15219-1818